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09/515,610	02/29/2000	Kenichi Ohta	1272.C0397	1685

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EXAMINER	
JONES, DAVID	

ART UNIT	PAPER NUMBER
2622	

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/515,610	OHTA ET AL.	
	Examiner	Art Unit	
	David L Jones	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *6-8,16,17,19-30,32 and 34-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9-15,18,31,33 and 38-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 February 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 4/21/04 has been entered and made of record. Claims 6-8, 16, 17, 19-30, 32, and 34-37 have been cancelled. Claims 1-5, 9-15, 18, 31, and new claims 38-40 are pending.

Response to Arguments

2. Applicant's arguments, see page 13, filed 4/21/04, with respect to the objection of the drawings have been fully considered and are persuasive. The objection of drawings has been withdrawn.

3. Applicant's arguments, see page 13, filed 4/21/04, with respect to the objections to the specification have been fully considered and are persuasive. The objection of specification has been withdrawn.

4. Applicant's arguments with respect to claims 1-5, 9-15, 18, 31, and 38-40 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-5, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banton (US 6,048,117) and further in view of Nakai et al. (US 5,946,457).

Regarding claim 1, Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10, the system includes a pattern output means (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. The test pattern 100 includes a plurality of color patches 105 in response to an input color pattern. As shown in fig. 2, (column 4, lines 6-38) the printer prints the color pattern and coded data, the printed matter is then subjected to either scanner on the MFD 15 or scanner 70, at this point the correction generation means for generating correction data for the particular apparatus is done through the calibration server 80. The calibration server sends calibrated data to the particular device through the network and the device is updated accordingly (column 4, lines 39-60).

Although Banton shows the devices on a network and that specifically teaches to select a device on the network and the unit is updated after calibration, Banton does not specifically teach a display on the MFD and being able to select a device on the network through the display.

Whereas, Nakai et al. teaches (column 24, lines 38-67 and column 25, lines 1-24) a system whereby a plurality of devices can be selected from the system on the display (fig. 24) of any of the digital copy machines fig. 1, 91-93, at this point the user is able to automatically let

the system choose the closest machines to utilize, but Nakai also states the user has the option of manually choosing which unit to use (column 25, lines 58-67).

Banton and Nakai et al. are analogous art because they both are from the same field of endeavor, image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the copier display of Nakai et al. with the multifunction device of Banton.

The suggestion/motivation for doing so would have been to provide the user the opportunity to send the print data to a unit that can accomplish the desired function as taught by Nakai et al.

Therefore, it would have been obvious to combine Banton with Nakai et al. to obtain the invention as specified in claim 1.

Regarding claim 2, Banton teaches (column 4, lines 39-60) wherein said means registers the data generated by the said correction data generation means in the image output apparatus through the network.

Regarding claim 3, Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10, the system includes a pattern output means (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. Banton does not explicitly teach that any of the devices are electro-graphic printers whereas, Nakai et al. teaches that printers 91-93 are digital copiers.

Regarding claim 4, Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10, the system includes a pattern output means (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. Nakai et al. teaches each of the copiers are digital devices. Nakai et al. does not teach a specific utilization of an inkjet printer. Although Banton specifically teaches (column 3, lines 29-30) that other types of color printing devices may be included, and that the system is related to devices such as MFD and plotters of which an inkjet printer is included in that class. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the system of Banton includes an inkjet printer.

Regarding claim 5, Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10, the system includes a pattern output means (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. as shown in fig. 1, the test pattern 100 includes a plurality of color patches 105 in response to an input color pattern and includes data representing properties of a desired calibration output.

Regarding claims 9 and 10, Banton teaches (column 3, lines 45-56) image processing system wherein said pattern output means that allows for a plurality of image output apparatuses

to be selected by said selection means to output the test patterns and respective identification information for identifying the image output apparatus outputting said test pattern, together. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that if the user so wanted to could cause multiple units to print out test patterns simultaneously. Further, Banton teaches (column 3, lines 19-44) that a plurality of devices can be in connection with each other and that the system is only a small representation, it would have been obvious that amount of devices that can be connected to a network is up to a system administrator, and in the case of Banton that both the printer and MFD can be caused to print out test patterns. Banton details in column 3, lines 54-67 and column 4, lines 1-5, that identification coded data is generated for each test pattern.

Regarding claim 11, Banton teaches (column 3, lines 54-67 and column 4, lines 1-5) that the identification coded data identifies a specific unit on the network including the devices printing type, serial number, calibration test pattern, orientation of test pattern, network address of device, network address of system administrator, date, time, device status, calibration statistics.

Regarding claim 12, Banton teaches (column 5, lines 20-31) that with the identification data 110 associated with a calibration print 100, the calibration process can identify which device printed the calibration print 100, what test pattern was printed, what an optimal output pattern should be, what format the color correction data should be in, and where to send the color correction data. The identification data 110 eliminates the need for a user to be involved in the recalibration process. Even in the scanning process, having the identification data 110 on the calibration print 100, a scanner can unambiguously scan the calibration print 100 and know the

type and location of color patches it is looking for. It would have been obvious to one of ordinary skill in the art at the time the invention was made that with the ability scan the test sheet without user intervention and be able to identify the particular device on the network from the coded information that a stack of test pattern can be scanned simultaneously without user intervention.

Regarding claims 13 and 14, Banton teaches (column 4, lines 61-67 and column 5, lines1-3) that the coded identification data is coded in a binary format using glyphs, which is a type of barcoded information. Further, Banton details that any series or combination of alphanumeric or graphic symbols may be used to encode the identification data 110.

Regarding claim 15, Banton teaches (column 3, lines 54-67 and column 4, lines 1-5) that the identification coded data identifies a specific unit on the network including the devices printing type, serial number, calibration test pattern, orientation of test pattern, network address of device, network address of system administrator, date, time, device status, calibration statistics.

Regarding claim 18, Banton shows the devices on a network and that specifically teaches to select a device on the network and the unit is updated after calibration, Banton does not specifically teach a display on the MFD and being able to select a device on the network through the display.

Whereas, Nakai et al. teaches (column 24, lines 38-67 and column 25, lines 1-24) a system whereby a plurality of devices can be selected from the system on the display (fig. 24) of any of the digital copy machines fig. 1, 91-93, at this point the user is able to automatically let the system choose the closest machines to utilize, but Nakai also states the user has the option of manually choosing which unit to use (column 25, lines 58-67). As shown in figure 25, on the

left side of the figure is shows a list of output devices PPC 1, PPC 2, PPC 3, PPC 4. Further, Nakai et al. teaches (column 24, lines 14-28) that the system checks or searches the system for devices that can accomplish a particular procedure and displays that on the respective device display as shown in figure 25.

Regarding claim 31, Banton teaches (column 4, lines 6-60) an image processing method of controlling a copying machine including an image reading means and image output unit, connected to a plurality of image output apparatuses via network, performing image processing using the image reading means, said method comprising:

a control step (column 3, lines 45-56) of controlling an operation of each of the plurality of image output apparatuses connected to the network;

a specifying step (column 3, lines 45-56) of specifying at least one image output apparatus, for which calibration is to be performed, from the plurality of image output apparatuses.

Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10, the system includes a pattern output means (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. The test pattern 100 includes a plurality of color patches 105 in response to an input color pattern. As shown in fig. 2, (column 4, lines 6-38) the printer prints the color pattern and coded data, the printed matter is then subjected to either scanner on the MFD 15 or scanner 70, at this point the

correction generation means for generating correction data for the particular apparatus is done through the calibration server 80. The calibration server sends calibrated data to the particular device through the network and the device is updated accordingly (column 4, lines 39-60).

Banton shows the devices on a network and that specifically teaches to select a device on the network and the unit is updated after calibration, Banton does not specifically teach a display on the MFD and being able to select a device on the network through the display.

Whereas, Nakai et al. teaches (column 24, lines 38-67 and column 25, lines 1-24) a system whereby a plurality of devices can be selected from the system on the display (fig. 24) of any of the digital copy machines fig. 1, 91-93, at this point the user is able to automatically let the system choose the closest machines to utilize, but Nakai also states the user has the option of manually choosing which unit to use (column 25, lines 58-67). As shown in figure 25, on the left side of the figure is shows a list of output devices PPC 1, PPC 2, PPC 3, PPC 4. Further, Nakai et al. teaches (column 24, lines 14-28) that the system checks or searches the system for devices that can accomplish a particular procedure and displays (in a list the devices that are able to accomplish the desired function) that on the respective device display as shown in figure 25.

Regarding claim 33, Banton teaches (column 3, lines 45-56) image processing system wherein said pattern output means that allows for a plurality of image output apparatuses to be selected by said selection means to output the test patterns and respective identification information for identifying the image output apparatus outputting said test pattern, together. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that if the user so wanted to could cause multiple units to print out test patterns simultaneously. Further, Banton teaches (column 3, lines 19-44) that a plurality of devices can be

in connection with each other and that the system is only a small representation, it would have been obvious that amount of devices that can be connected to a network is up to a system administrator, and in the case of Banton that both the printer and MFD can be caused to print out test patterns. Banton details in column 3, lines 54-67 and column 4, lines 1-5, that identification coded data is generated for each test pattern.

Regarding claim 38, Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10 (network interface), the system includes a pattern output section (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. The test pattern 100 includes a plurality of color patches 105 in response to an input color pattern. As shown in fig. 2, (column 4, lines 6-38) the printer prints the color pattern and coded data, the printed matter is then subjected to either scanner on the MFD 15 or scanner 70, at this point the correction generation section for generating correction data for the particular apparatus is done through the calibration server 80. The calibration server sends calibrated data to the particular device through the network and the device is updated accordingly (column 4, lines 39-60) (setting section).

Although Banton shows the devices on a network and that specifically teaches to select a device on the network and the unit is updated after calibration, Banton does not specifically teach a display on the MFD and being able to select a device on the network through the display.

Whereas, Nakai et al. teaches (column 24, lines 38-67 and column 25, lines 1-24) a system whereby a plurality of devices can be selected from the system on the display (fig. 24) of any of the digital copy machines fig. 1, 91-93, at this point the user is able to automatically let the system choose the closest machines to utilize, but Nakai also states the user has the option of manually choosing which unit to use (column 25, lines 58-67).

Banton and Nakai et al. are analogous art because they both are from the same field of endeavor, image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the copier display of Nakai et al. with the multifunction device of Banton.

The suggestion/motivation for doing so would have been to provide the user the opportunity to send the print data to a unit that can accomplish the desired function as taught by Nakai et al.

Therefore, it would have been obvious to combine Banton with Nakai et al. to obtain the invention as specified in claim 38.

Regarding claim 39, Banton teaches (column 4, lines 6-60) an image processing method of controlling a copying machine including an image reading means and image output unit, connected to a plurality of image output apparatuses via network, performing image processing using the image reading means, said method comprising:

a control step (column 3, lines 45-56) of controlling an operation of each of the plurality of image output apparatuses connected to the network;

a specifying step (column 3, lines 45-56) of specifying at least one image output apparatus, for which calibration is to be performed, from the plurality of image output apparatuses.

Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10, the system includes a pattern output means (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. The test pattern 100 includes a plurality of color patches 105 in response to an input color pattern. As shown in fig. 2, (column 4, lines 6-38) the printer prints the color pattern and coded data, the printed matter is then subjected to either scanner on the MFD 15 or scanner 70, at this point the correction generation means for generating correction data for the particular apparatus is done through the calibration server 80. The calibration server sends calibrated data to the particular device through the network and the device is updated accordingly (column 4, lines 39-60).

Banton shows the devices on a network and that specifically teaches to select a device on the network and the unit is updated after calibration, Banton does not specifically teach a display on the MFD and being able to select a device on the network through the display.

Whereas, Nakai et al. teaches (column 24, lines 38-67 and column 25, lines 1-24) a system whereby a plurality of devices can be selected from the system on the display (fig. 24) of any of the digital copy machines fig. 1, 91-93, at this point the user is able to automatically let the system choose the closest machines to utilize, but Nakai also states the user has the option of

manually choosing which unit to use (column 25, lines 58-67). As shown in figure 25, on the left side of the figure is shows a list of output devices PPC 1, PPC 2, PPC 3, PPC 4. Further, Nakai et al. teaches (column 24, lines 14-28) that the system checks or searches the system for devices that can accomplish a particular procedure and displays (in a list the devices that are able to accomplish the desired function) that on the respective device display as shown in figure 25.

Regarding claim 40, Banton teaches (column 4, lines 6-60) an image processing method of controlling a copying machine including an image reading means and image output unit, connected to a plurality of image output apparatuses via network, performing image processing using the image reading means, said method comprising:

a control step (column 3, lines 45-56) of controlling an operation of each of the plurality of image output apparatuses connected to the network;

a specifying step (column 3, lines 45-56) of specifying at least one image output apparatus, for which calibration is to be performed, from the plurality of image output apparatuses.

Banton teaches (column 3, lines 45-56) a system (fig. 1) whereby a plurality of devices (scanner 70, multifunction device (MFD) 15 (which is interpreted to be a copier), printer 45, and calibration server 80) are connected to a network 10, the system includes a pattern output means (printer 45 or MFD 15) for causing the selected image output apparatus to output a predetermined test pattern, as taught by Banton to calibrate a device a user initiates calibration by requesting either device to generate an electronic test pattern 100. The test pattern 100 includes a plurality of color patches 105 in response to an input color pattern. As shown in fig. 2, (column 4, lines 6-38) the printer prints the color pattern and coded data, the printed matter is then

subjected to either scanner on the MFD 15 or scanner 70, at this point the correction generation means for generating correction data for the particular apparatus is done through the calibration server 80. The calibration server sends calibrated data to the particular device through the network and the device is updated accordingly (column 4, lines 39-60).

Banton shows the devices on a network and that specifically teaches to select a device on the network and the unit is updated after calibration, Banton does not specifically teach a display on the MFD and being able to select a device on the network through the display.

Whereas, Nakai et al. teaches (column 24, lines 38-67 and column 25, lines 1-24) a system whereby a plurality of devices can be selected from the system on the display (fig. 24) of any of the digital copy machines fig. 1, 91-93, at this point the user is able to automatically let the system choose the closest machines to utilize, but Nakai also states the user has the option of manually choosing which unit to use (column 25, lines 58-67). As shown in figure 25, on the left side of the figure is shows a list of output devices PPC 1, PPC 2, PPC 3, PPC 4. Further, Nakai et al. teaches (column 24, lines 14-28) that the system checks or searches the system for devices that can accomplish a particular procedure and displays (in a list the devices that are able to accomplish the desired function) that on the respective device display as shown in figure 25. Further, as the system is incorporated within computer systems of both Banton and Nakai et al. it would have been obvious to one of ordinary skill in the art at the time the invention was made that the systems as taught by both are incorporated into computer code.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lin et al. (US 6,404,511) discloses a technique for calibrating non-reference printers to a reference printer in a network system.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L Jones whose telephone number is (703) 305-4675. The examiner can normally be reached on Monday - Friday (7:00am - 3:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David L. Jones

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